

ABSTRACT

When a predetermined voltage is applied between electrodes (302), metal ions deposit in a solid electrolyte (308), and thereby a conduction channel (310) is formed therein. The solid electrolyte switch (300) is thus turned on. Because this deposition mechanism is reversible, application of reverse voltage between the electrodes of the solid electrolyte switch (300) already turned on makes the deposited metal atoms to migrate in the solid electrolyte to thereby thin the conduction channel 300, thereby the channel finally disappears, and the solid electrolyte switch (300) is turned into a non-conductive state. Use of this switch successfully realizes an IC tag which can automatically be nullified without artificial nullification.